

REMARKS

Claim 1-62 are pending. Claims 1-62 are rejected. No new matter has been added. Claims 1, 24, 33 and 43 have been amended. No claims have been added. Reconsideration of the claims is requested in view of the following remarks.

Claim Objections

Claim 33 is objected to because of the following informalities: if "a replication flag" in line 7 implies to "a replication flag" in lines 4-5, "the replication flag" or "said replication flag" should be used. Applicants agree with Examiner and amended the claim to correct the antecedent reference.

Claim Rejections - 35 USC § 112

Claim 33 is rejected under 35 USC 112 as failing to comply with the written description requirement. The feature "receive from the first device original voice data in an *original packet containing a replication flag*" found no support by the specification. Applicants assert the limitation "receive from the first device original voice data in an *original packet containing a replication flag*" is supported by the specification, nonetheless, this limitation was deleted from claim 33 for reasons not related to patentability. This 35 USC 112 rejection is therefore moot.

Claim Rejections – 35 USC § 102

Claims 1-6, 8, 10, 14-16, 24-27, 30, 33-36, 43-48, 49, 51 and 54-57 are rejected under 35 USC 102(e) as being anticipated by Schuster et al. (U.S. Pat. No. 6,170,075 B1) ("Schuster").

Claim 1 is restricted to a method comprising:

- a first device establishing a connection with a second device through a network according to a packet network communication protocol;
- the first device transmitting to the second device original voice data in original packets through the connection;
- detecting the connection is under utilized;
- generating redundant data by replicating the original voice data;
- and
- adding at least some of the redundant data to the original packets.

Schuster discusses a method and apparatus for improving the speed and quality of end-to-end data or real-time media transmissions over an internet (Abstract). Furthermore, Schuster involves a media stream being transmitted to the internet being channel coded at the edge of the internet in order to free upstream bit rate for use in source coding the media. The channel coded media stream is then decoded at a remote edge of the internet to recover lost packets. Schuster therefore deals with only channel coding the packet data without channel coding the data over a link to the Internet, such as a high reliability low bit-rate channel like a telephone line. Schuster does not teach generating redundant data by replicating original voice data if a connection is detected as under utilized. Therefore claim 1 is patently distinguishable over the prior art. Claims 2-23 ultimately depend from claim 1. Since dependent claims necessarily include the limitations of claims from which they depend, claims 2-23 are also patentably distinguishable over the prior art.

Independent claims 24, 33 and 43 contain similar limitations as claim 1, namely, generating redundant data by replicating original voice data when a connection is detected as underutilized. Therefore claims 24, 33 and 43 are also patentably distinguishable over the prior art in similar fashion to claim 1. All dependent claims from these independent claims necessarily contain the limitations of the claims from which they depend. Therefore all claims are patentably distinguishable over the prior art.

Claim Rejections – 35 USC § 103

Claims 7 and 29 are rejected under 35 USC 103(a) as being unpatentable over Schuster in view of Pandula (U.S. Pat. No. 5,640,415) ("Pandula").

Claims 7 and 29 incorporate the limitations from their independent claims, in particular, generating redundant data by replicating original voice data if a connection is detected as under utilized. As shown above, Schuster does not teach generating redundant data by replicating original voice data if a connection is detected as under utilized. Pandula discusses the technique of redundantly retransmitting digitized voice data on multiple sequential frequencies to increase the channel bit rate above the minimum required for normal communication in a frequency-hopping communication system for digitized voice signals (Abstract). This does not cure the deficiencies of Schuster, therefore claims 7 and 29 are patentably distinguishable over the prior art.

Claims 9, 21-23, 28, 40-42, 50 and 60-62 are rejected under 35 USC 103(a) as being unpatentable over Schuster in view of Tsunoda (US Pat No. 6,516,435 B1) ("Tsunoda").

Claims 9, 21-23, 28, 40-42, 50 and 60-62 incorporate the limitations from their independent claims, in particular, generating redundant data by replicating original voice data if a connection is detected as under utilized. As shown above, Schuster does not teach generating redundant data by replicating original voice data if a connection is detected as under utilized. Tsunoda discusses a code transmission scheme for a communication system using error correcting codes, the transmitting side generating at least one transmitting side syndrome value by carrying out a syndrome calculation for the information to be transmitted and transmitting to a receiving side at least one information packet containing the information to be transmitted and at least one redundant packet containing the transmitting side syndrome value (Abstract).

Furthermore, Tsunoda discusses the receiving side, upon receiving at least a part of the information packet and the redundant packet, obtaining at least one receiving side syndrome value by carrying out a syndrome calculation for an information contained in the information packet as received, and performing error correction, if required, by calculating a difference between the transmitting side syndrome value contained in the received redundant packet and the receiving side syndrome value, so that a circuit size and an amount of software programs can be reduced without affecting the error correction performance. This does not cure the deficiencies of Schuster, therefore claims 9, 21-23, 28, 40-42, 50 and 60-62 are patentably distinguishable over the prior art.

Claims 11, 12, 18, 19, 31, 32, 37, 38, 52, 53, 58 and 59 are rejected under 35 USC 103(a) as being unpatentable over Schuster in view of Dedrick (US Pat. No. 5,754,787) ("Dedrick").

Claims 11, 12, 18, 19, 31, 32, 37, 38, 52, 53, 58 and 59 incorporate the limitations from their independent claims, in particular, generating redundant data by replicating original voice data if a connection is detected as under utilized. As shown above, Schuster does not teach generating redundant data by replicating original voice data if a connection is detected as under utilized. Dedrick discusses a smart electronic information transport router which correctly transmits electronic information when connected to multiple parallel but bandwidth diverse transport channels (Abstract). Furthermore, it discusses a smart electronic information transport router that allows an electronic information publisher to

label each electronic information object or object stream specifying minimum and maximum required transport/delivery throughput data rates for the various media types included within the electronic information being electronically published. This does not cure the deficiencies of Schuster, therefore claims 11, 12, 18, 19, 31, 32, 37, 38, 52, 53, 58 and 59 are patentably distinguishable over the prior art.

Claims 13, 20 and 39 are rejected under 35 USC 103(a) as being unpatentable over Schuster in view of Dedrick and further in view of Sidhu et al (US Pat. No. 6,366,959) ("Sidhu").

Claims 13, 20 and 39 incorporate the limitations from their independent claims, in particular, generating redundant data by replicating original voice data if a connection is detected as under utilized. As shown above, Schuster does not teach generating redundant data by replicating original voice data if a connection is detected as under utilized. Dedrick discusses a smart electronic information transport router which correctly transmits electronic information when connected to multiple parallel but bandwidth diverse transport channels. Furthermore, it discusses a smart electronic information transport router that allows an electronic information publisher to label each electronic information object or object stream specifying minimum and maximum required transport/delivery throughput data rates for the various media types included within the electronic information being electronically published.

Sidhu discusses a method and apparatus for communicating system buffer size and error correction coding selection (Abstract). This does not cure the deficiencies of Schuster in view of Dedrick, therefore claims 13, 20 and 39 are patentably distinguishable over the prior art.

CONCLUSION

For the foregoing reasons, reconsideration and allowance of claims 1-62 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

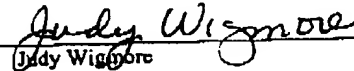
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